

Rare Case of Posterior Dislocation on Total Postero-Stabilized Knee Prosthesis

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Abstract :- dislocation after a total knee prosthesis, is a rare and worrying complication, it is a surgical emergency that requires rapid treatment, and to know the main cause of the dislocation which can be diverse. We report the case of a patient who had a complication on stabilized postero total knee prosthesis in whom the prosthesis was changed by increasing the constraint.

Keywords:- Total Knee Prosthesis , Dislocation, Postero-Stabilised ,Emergency , Constraint.

I. INTRODUCTION

Dislocation after total knee arthroplasty on a stabilized postero prosthesis is a rare and serious complication, the incidence is 0.15 to 0.5 %, very few cases are reported in the literature[1][2] We report the case of a 74 -year -old patient operated 05 years ago for tricompartmental knee gonarthrosis.

II. MATERIAL AND METHOD

We report the case of a 74-year-old patient treated for tricompartmental gonarthrosis of the left knee with a posterior-stabilized total knee prosthesis.

We will detail the diagnostic elements as well as the therapeutic conduct that we led. Then, we will finish with a review of the literature that has been continuously enriched in recent years.

A 74-year-old man with a history of arterial hypertension, diabetes, and total arthroplasty of the left knee with a posterior-stabilized prosthesis using a mobile-platform plot cam system was admitted to the emergency room for painful swelling of the left knee following a fall on the sole of the foot with a hyperbent knee during a domestic accident.

The clinical examination found a deformed left knee, swollen, a shortened lower limb, without neurovascular signs.

After immobilization, a standard radiological assessment of the knee in front and in profile was requested showing a pure posterior dislocation on the left TKA.

An emergency doppler ultrasound was made and has not revealed any vascular anomaly. Faced with this clinico-radiological picture and after consulting the availability of implants in the operating room, an open-air reduction was

made, with ultracongruent prosthesis .The patient benefited from a post-operative rehabilitation, authorizing a knee bending up to 90 ° for the 30 days of the intervention with authorized protected support.



Image 1 :Lateral x-ray showing posterior ptg dislocation



Image 2 : AP x-ray showing posterior TKA dislocation



Image 3 : Ap et lateral x-ray showing post-operative results

III. DISCUSSION

Posterior dislocation after total knee arthroplasty is a rare complication[1][2]. The most frequently reported causes of TKA instability and dislocation are implant malposition[1][2][3], inadequate flexion-extension gap, tissue release (usually for valgus deformity, with extensive posterolateral release), extensor system failure, polyethylene wear, and inadequate primary implant selection[1][3]. Postero Stabilised knee prostheses are designed to provide stability after sacrifice of the posterior cruciate ligament (PCL).

In the case of our patient, hyperflexion has created a conflict that led to a significant roll-back and then a posterior dislocation.

Reduction of the dislocation is an emergency, because the neurovascular risk is not negligible, 04 cases of neurovascular complications have been reported in the literature[4][5].

The lesions of the collateral ligaments can be observed, creating a knee instability which may require surgical recovery[3].

IV. CONCLUSION

The dislocation of the knee arthroplasty is exceptional and requires urgent surgical management for reduction, because the neurovascular risk is significant. Several etiologies can be responsible for this type of dislocation, the most frequent of which is the mismatch in flexion-extension.

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